

# Montana Laboratory Sentinel

Updates from the MT Laboratory Services Bureau



<http://healthlab.hhs.mt.gov/> 03/31/10



Sgt. Jennifer Simmons, Cpt. Juan Stevens, Joel Felix - Chemical Terrorism Coordinator, Kathy Martinka - Biological Terrorism Coordinator

## 83<sup>rd</sup> Civil Support Team Collaborates with Montana Laboratory Preparedness

Cpt. Juan Stevens, 83<sup>rd</sup> Civil Support Team (CST), Montana Army National Guard, recognized the collaboration between the CST's Analytical Laboratory System (ALS) and the Montana Laboratory Services Bureau. "In a career there are many people that help us along the way. But there is unequivocally a difference between those who help and those who take you under the wing of their organization and work for the common good of the organizations involved.

During the last year the State Laboratory and our Analytical Section of the CST have been working together to enhance each others' knowledge and readiness. Kathy Martinka and Joel Felix have been pivotal in helping us accomplish this goal. They have provided real life unknowns for our monthly training exercises and provided assistance and recommendations on the new ALS Block 1 Equipment (mobile laboratory) upgrades for both biological and chemical.

In addition they have allowed us to participate in their training. This relationship has resulted in an agreement to help each other during emergency situations."

## Exploring the Rivers of Change

### ASCLS-MT Spring Meeting & Educational Sessions

Missoula April 14-17, 2010

[Click here](#) Program Details & Registration

17 Educational Sessions  
PACE Continuing Education Credits

Read more about the meeting in ASCLS's Montana Laboratory News: <http://ascls-montana.asclsregionviii.org/MLN%20Spring%202010.pdf>

*To love what you do and feel that it matters  
How could anything be more fun?"*

Catherine Graham

## Safety Training Case Study

Jeanie was helping unpack supplies one day when she received a box of controls packed with dry ice. Thinking that she knew a good way to dispose of the dry ice, she dumped it in the toilet in our bathroom. Sometime later, Kimberly, the chemistry tech went into the bathroom. In a few minutes, we heard an explosion of sorts and Kimberly comes out soaking wet, carrying her shoes. The toilet had erupted when she flushed it. She had no idea what had just happened.

Talking Points: Composition of dry ice; How to dispose of dry ice properly

Thank you to [www.safetylady.com](http://www.safetylady.com) for safety training.



Interior of ALS – Cpt. Juan Stevens prepares unknown specimens for testing



Fully equipped laboratory with GC-MS, infrared microscope and PCR capabilities



Mary Simmons, Kathy Martinka, Joel Felix, Juan Stevens, Analytical Laboratory System (ALS) truck.

## MT Communicable Disease Update Week 10 Ending 03/13/10

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.

Questions regarding its content should be directed to 406.444.0273 (24/7/365).

<http://cdepi.hhs.mt.gov>

### **DISEASE INFORMATION**

**Summary – Week 10 – Ending 03/13/10** – Disease reports received at DPHHS during the reporting period March 7-13, 2010 included the following:

- Vaccine Preventable Diseases: Invasive *Streptococcus pneumonia* (1), Invasive Meningococcal Disease (1), Varicella (17)
- Enteric Diseases: Campylobacteriosis (4), Cryptosporidiosis (3), Giardiasis (5), Salmonellosis (2)
- Other Conditions: Viral Meningitis (1), Tuberculosis (4)

### **Surveillance Snippets – Serologic Testing for Acute Infection**

Some diseases are detected using serologic assays. Many of these diseases like vector-borne diseases, and many vaccine preventable diseases, require TWO blood specimens in order to confirm that the disease in question is recently acquired. IgM and IgG antibodies in the blood are measured to determine whether a person's infection is recently acquired.

- In general, a high IgM titer is an indicator of a specific and recent infection.
- However, IgG is also used to confirm a recent infection. A four-fold increase in the IgG titer from the time an acute specimen is drawn (within one week of onset of disease) to when a convalescent specimen is drawn (2-4 weeks after onset of disease), indicates a recent infection.
- When testing for a recent infection, IgM AND IgG testing on paired sera (acute/convalescent) is best.

Disease Status	IgM	Acute IgG	Convalescent IgG
Recent infection	High	Not present or low	Four-fold increase
Past Infection	Low or not detectable	Present	No or slight increase

\* General information; disease specific criteria should be used when determining timing for IgM and IgG testing

Many thanks to Denise Higgins, Montana Public Health Laboratory, for her assistance in writing this "snippet".

### **Influenza**

**Montana** – Activity level in Montana for week 10 is **NO ACTIVITY. NEW!** There was one PCR confirmed case of H1N1 influenza the week of March 15, in a Fergus County resident who had exposure to an ill person who acquired their illness from Ohio. There was intra-family spread related to this case. **IMPORTANT! Interpret positive rapid influenza tests with caution at this time.** A positive screening test result is most likely to be truly positive during periods of peak influenza activity in the population tested. A positive screening test result is most likely to be falsely positive during periods of low influenza activity in the population tested, including early and late in the influenza season. Per IDSA Guidelines, a confirmatory test such as PCR or viral culture should be considered (<http://www.journals.uchicago.edu/doi/pdf/10.1086/598513>). Current information on influenza testing by the Montana Public Health Laboratory can be found at <http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml>.

**United States - During week 10 (03/13/10),** influenza activity stayed at the same level as the previous week. (<http://www.cdc.gov/flu/weekly/>)

### **Diarrheal Disease and Food Recalls**

Hydrolyzed Vegetable Protein Product Recalls - **The U.S. Food and Drug Administration is actively investigating findings of *Salmonella* Tennessee in hydrolyzed vegetable protein (HVP) manufactured by Basic Food Flavors, Inc., in Las Vegas, NV. HVP is a flavor enhancer used in a wide variety of processed food products, such as soups, sauces, chilis, stews, hot dogs, gravies, seasoned snack foods, dips, and dressings.** At this time, no illnesses associated with this contamination have been reported to the FDA; however, multiple food products are involved in this recall. Updates to the recall list can be found at: <http://www.fda.gov/Safety/Recalls/MajorProductRecalls/HVP/default.htm>.

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**NEW! Rabies 4 Dose PEP Recommendations Released** - The March 19 issue of the MMWR contains new recommendations for rabies PEP in unvaccinated persons. Previously, ACIP recommended a 5-dose rabies vaccination regimen for post-exposure prophylaxis. **These new recommendations reduce the number of vaccine doses to four.** For persons previously unvaccinated with rabies vaccine, the reduced regimen of 4 1-mL doses of HDCV or PCECV should be administered intramuscularly. The first dose of the 4-dose course should be administered as soon as possible after exposure (day 0). Additional doses then should be administered on days 3, 7, and 14 after the first vaccination. ACIP recommendations for the use of RIG remain unchanged. PEP recommendations for other circumstances and/or special populations HAVE NOT changed. Prompt rabies PEP combining wound care, infiltration of RIG into and around the wound, and multiple doses of rabies cell-culture vaccine continue to be highly effective in preventing human rabies. Details about the new recommendations are attached (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5902a1.htm>).

Summary of Current Recommendations for Rabies PEP: <http://www.cdc.gov/rabies/exposure/postexposure.html>

**NEW! Ticks Are Out!** - With the warmer weather, ticks are out and about again! As a reminder, if virus-specific serum antibody titers are being used to diagnose disease (e.g., Rocky Mountain spotted fever, tick-borne relapsing fever, Colorado tick fever, Q fever) the CDC *surveillance case definitions* for these diseases generally require acute and convalescent phase testing in order to confirm as a case. (see surveillance snippet above)  
For more information on case definitions: [http://www.cdc.gov/ncphi/diss/nndss/casedef/case\\_definitions.htm](http://www.cdc.gov/ncphi/diss/nndss/casedef/case_definitions.htm).

**NEW! CDC Everyday Preventive Actions** – CDC has released a new version of its “Everyday Preventive Actions” educational brochure: [http://www.cdc.gov/flu/freeresources/2009-10/pdf/everyday\\_preventive.pdf](http://www.cdc.gov/flu/freeresources/2009-10/pdf/everyday_preventive.pdf)

**2008 Antibigram** – The 2008 cumulative state antibiogram, results from a survey of 34 laboratories from across Montana, is now available at <http://mara.mt.gov/documents/2008Antibiogram.pdf>. Questions? Jan Stetzer at [jstetzer@mt.gov](mailto:jstetzer@mt.gov) or 406.444.0695

## MT Communicable Disease Update Week 11 Ending 03/20/10

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.

Questions regarding its content should be directed to 406.444.0273 (24/7/365).

<http://cdepi.hhs.mt.gov>

### **DISEASE INFORMATION**

**Summary – Week 11 – Ending 03/20/10** – Disease reports received at DPHHS during the reporting period March 14-20, 2010 included the following:

- Vaccine Preventable Diseases: Varicella (1)
- Enteric Diseases: Campylobacteriosis (1), Giardiasis (2)
- Other Conditions:
- Travel Related Conditions: Coccidioidomycosis (1)

### **Influenza**

**Montana** – Activity level in Montana for week 11 is **NO ACTIVITY**. There was one PCR confirmed case of H1N1 influenza the week of March 15, in a Fergus County resident who had exposure to an ill person who acquired their illness from Ohio. There was intra-family spread related to this case. **IMPORTANT! Interpret positive rapid influenza tests with caution at this time.** A positive screening test result is most likely to be truly positive during periods of peak influenza activity in the population tested. A positive screening test result is most likely to be falsely positive during periods of low influenza activity in the population tested, including early and late in the influenza season. Per IDSA Guidelines, a confirmatory test such as PCR or viral culture should be considered (<http://www.journals.uchicago.edu/doi/pdf/10.1086/598513>). Current information on influenza testing by the Montana Public Health Laboratory can be found at <http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml>.

**NEW! Influenza in Pregnancy** - Attached is a publication from the MMWR about H1N1 infection among pregnant women in NYC that identifies both increased risk for hospitalization and ICU admission compared to non-pregnant women, as well as several missed opportunities for prevention. Current recommendations for treatment and prevention of influenza in pregnant women are available at [http://www.cdc.gov/H1N1flu/pregnancy/antiviral\\_messages.htm](http://www.cdc.gov/H1N1flu/pregnancy/antiviral_messages.htm)

**United States - During week 11 (03/20/10)**, influenza activity remained at approximately the same levels as last week. (<http://www.cdc.gov/flu/weekly/>)

### **Diarrheal Disease and Food Recalls**

**Hydrolyzed Vegetable Protein Product Recalls** - The U.S. Food and Drug Administration continues to investigate findings of *Salmonella* Tennessee in hydrolyzed vegetable protein (HVP) manufactured by Basic Food Flavors, Inc., in Las Vegas, NV. HVP is a flavor enhancer used in a wide variety of processed food products, such as soups, sauces, chilis, stews, hot dogs, gravies, seasoned snack foods, dips, and dressings. At this time, no illnesses associated with this contamination have been reported to the FDA; however, multiple food products are involved in this recall. Updates to the recall list can be found at: <http://www.fda.gov/Safety/Recalls/MajorProductRecalls/HVP/default.htm>.

**NEW! Hepatitis Information** -The National Training Center for Integrating Hepatitis into HIV/STD Prevention Services ([www.KnowHepatitis.org](http://www.KnowHepatitis.org)) has two new documents:

#### **ABC's of Hepatitis - Information for the Front Line Worker**

by Laura Bachmann, MD, MPH - Associate Professor of Medicine, Wake Forest University  
<http://www.knowhepatitis.org/abcstraining>

#### **IOM Report: A National Strategy for Prevention and Control of Hepatitis B and C**

by John W. Ward, MD – Director of the Division of Viral Hepatitis, CDC  
<http://www.knowhepatitis.org/iom>

**NEW! Communicable Disease Summary: A Guide for Schools** – The Communicable Disease Summary: A Guide for Schools is will be mailed to all Montana K-12 schools, local health departments and infection preventionists soon. The guide is available at: <http://www.dphhs.mt.gov/PHSD/epidemiology/schools.shtml>